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April 23, 1992

APR 23 1992

Ms. Donna R. Searcy, Secretary  
Federal Communications Commission  
1919 M Street, N.W., Room 222  
Washington, D.C. 20554

Federal Communications Commission  
Office of the Secretary  
EX PARTE

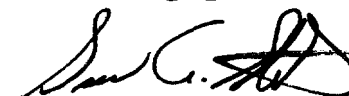
Re: ET Docket No. 92-9

Dear Ms. Searcy:

Pursuant to Section 1.1206(a)(2) of the Commission's Rules, this is to notify you that the Utilities Telecommunications Council (UTC) made an oral ex parte presentation to the Office of Engineering and Technology on April 23, 1992. Enclosed is a written summary of the presentation.

Should any questions arise concerning this notification, please communicate with the undersigned.

Cordially yours,

  
Sean A. Stokes  
Staff Attorney

Enclosure

cc: Dr. Thomas P. Stanley  
Public Inspection File

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April 20, 1992

EX PARTE in ET Docket No. 92-9

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**RECOMMENDED FCC ACTION PLAN**

APR 23 1992

**I. Modify the De Facto "Freeze" on 2 GHz Microwave Licensing**

Federal Communications Commission  
Office of the Secretary

- A. The licensing policy for private microwave facilities in the 1850-1990 MHz, 2130-2150 MHz and 2160-2200 MHz bands ("2 GHz bands") adopted in the Notice of Proposed Rule Making ("NPRM") in ET Docket No. 92-9, which was to prevent the filing of speculative 2 GHz applications, has caused severe hardship by preventing reasonable modifications to existing systems. Short of removing this de facto "freeze" on the filing of 2 GHz applications, the policy should be modified as follows:

To be granted on a primary basis, applications for new or modified facilities in the 2 GHz band submitted after the adoption date of the NPRM must be accompanied by information demonstrating that:

1. The proposed facilities, either new or modified, will augment the applicant's previously authorized microwave system to meet the applicant's legitimate communications requirements; or
  2. If for completely new facilities, the applicant has legitimate communications requirements that cannot be met in other frequency bands due to rule limitations or lack of equipment availability.
- B. Modification along these lines would permit licensees to complete planned system expansions (such as by closing microwave "loops" or adding "spurs" from backbone microwave systems), make more efficient use of existing systems (such as by converting from analog to digital), and permit the licensing of new systems where it can be shown the application is not for sheer speculation.

**II. Defer Final Action in the "Spectrum Reserve" Docket (ET Docket No. 92-9), Pending Completion of Separate Rulemaking Dockets or Further NPRM's in ET Docket No. 92-9 to:**

- A. Designate the 2500-2690 MHz band as the Spectrum Reserve instead of the 2 GHz bands, since in its NPRM in ET Docket No. 92-9 the Commission gave insufficient consideration to this band as the Spectrum Reserve. It is ideal for the Spectrum Reserve because:**
  - 1. It would yield almost as much spectrum as the 2 GHz bands (190 MHz vs. 220 MHz);
  - 2. Compared to the 2 GHz bands, it is very lightly loaded with existing stations and could be used for emerging technology at an early date and with modest relocation costs; and,
  - 3. Existing and future ITFS operations in this band could be relocated to the 4, 6 and 11 GHz bands; and, MDS operations could be relocated to the unoccupied 12 GHz band, which is already earmarked for direct-to-home video programming.
- B. Open up the 4, 6 and 11 GHz bands to ITFS operations and the 12 GHz band to MDS operations.**
- C. As requested in UTC's March 31, 1992 Rulemaking Petition:**
  - 1. Make an agreement with NTIA to open up the 1710-1850 MHz Federal government microwave band for use by private microwave licensees.
  - 2. Modify the technical rules for the common carrier 4, 6 and 11 GHz microwave bands to accommodate private microwave systems (e.g., narrower channel bandwidths and reduced loading requirements).

**III. Summary of UTC's March 31, 1992 Petition for Rulemaking**

**A. Adequate Replacement Spectrum Is Needed**

If the 2 GHz bands are used as a Spectrum Reserve, a necessary condition precedent is that the Commission have in place adequate replacement spectrum with appropriate technical characteristics for displaced private microwave systems.

**B. The FCC's Replacement Spectrum Proposals Are Inadequate**

In ET Docket No. 92-9, the Commission proposes to grant a blanket waiver of the eligibility requirements for the common carrier and private microwave bands above 3 GHz. The Commission does not, however, plan to waive the technical or channelization requirements of these bands. This approach is unworkable:

1. The existing private microwave allocations above 3 GHz are insufficient to accommodate all of the 2 GHz private microwave users.
2. The common carrier microwave bands above 3 GHz, as presently configured, are not suitable for the more than 22,000 private microwave facilities currently licensed in the 2 GHz band.
3. The OET study did not take the channel bandwidths or other technical characteristics of the higher frequency bands into consideration when it determined the level of available spectrum. For example:
  - a. The higher bands do not contain an adequate number of narrowband channel pairs to accommodate the 13,000 existing 2 GHz "skinny route" (2.10-2.20 GHz) stations; e.g., there are 24 pairs of 800 kHz channels in the 2 GHz band, but only 5 pairs of 800 kHz channels in the 6 GHz band. As presently configured, the 6 GHz private microwave band would probably be able to accommodate only about one-fourth of the 13,000 "skinny route" private microwave stations in the 2 GHz band.
  - b. The remaining channels in the 6 GHz private microwave band are 5 or 10 MHz wide, and the common carrier 4 and 6 GHz bands are channelized for generally 20 or 30 MHz bandwidths.
4. The channel loading requirements for the 4 and 6 GHz common carrier bands are such that most private microwave systems, would be ineligible for relocation to these channels. Section 21.710 requires licensees of 4 or 6 GHz common carrier channels to load to a minimum of 900 voice-grade channels (4 kHz or equivalent) within 5 years, or to operate at a minimum data rate of 10 Mb/s.

5. Because of the proliferation of satellite earth receive stations in the 3.7-4.2 GHz band, both licensed and unlicensed, it is doubtful as a practical matter whether this band, as presently configured, can absorb any of the displaced 2 GHz operations.

C. Why Action in ET Docket No. 92-9 Should Be Deferred Pending Action In A Separate Rulemaking

Because the NPRM in ET Docket No. 92-9 does not propose any changes in any of the technical or operational rules of the bands above 3 GHz, resolution of these issues would be beyond the scope of the existing NPRM in ET Docket No. 92-9. The Commission should therefore defer action in ET Docket No. 92-9, and initiate a separate rulemaking proceeding to revise the technical and coordination rules to make additional spectrum available for private microwave systems.

D. Frequency Allocations and Technical Rule Changes Needed for Private Microwave Systems

1710-1850 MHz (1.71-1.85 GHz) Federal Government Band

1. There are no restrictions on the FCC's ability to enter into negotiations with NTIA regarding sharing of this currently-exclusive government band. (Senator Hollings April 6, 1992 letter to Chairman Sikes suggested accommodating 2 GHz band users' legitimate needs ". . . by expanding the use of or reallocating federal spectrum. . . .").
2. Relocation of displaced 2 GHz microwave users to the 1.71-1.85 GHz band would cause the least disruption to on-going 2 GHz operations, since the propagation characteristics of both bands are nearly identical and the cost of such a relocation would be substantially less than a shift to a higher band.
3. Any shared use of this band with the Federal government would have to ensure that the Federal users of the band experience no interference to their existing operations.
4. In a just-released Spectrum Resource Assessment (SRA), NTIA has confirmed the suitability of the 1.71-1.85 GHz band for shared use by private microwave systems. The SRA reveals that of the 5,539 frequency assignments currently listed in the Government Master File (GMF) for the 1.71-1.85

GHz band, about 4,840 (87%) are in the fixed service for point-to-point, line-of-sight, operations.

#### 4 GHz Common Carrier Band

1. The 3.7-4.2 GHz (4 GHz) common carrier band should be made available for routine licensing in the Private Operational Fixed Microwave Service on a co-primary basis.
2. The 4 GHz band should be rechannelized into 1.6 MHz, 5 MHz and 10 MHz bandwidth channels that would be available for "stacking" to accommodate systems with wider bandwidth requirements. Loading requirements for this band should be eliminated for private microwave systems.
3. Because of the proliferation of earth stations in the 4 GHz band the Commission should designate at least 80 MHz (e.g., 40 MHz from either end of the band) as being available to the Fixed-Satellite Service on a secondary-only basis, thereby limiting primary use of this spectrum to the Fixed Services under Parts 21 and 94.

#### 6 GHz Common Carrier Band

1. The 5.925-6.425 GHz (6 GHz) common carrier band should be made available for routine licensing on a co-primary basis in the Private Operational Fixed Microwave Service.
2. The 6 GHz common carrier band also should be rechannelized into 1.6 MHz, 5 MHz and 10 MHz bandwidth channels that would be available for "stacking" in order to accommodate systems with wider bandwidth requirements. Loading requirements for this band should be eliminated for private microwave systems.

#### 11 GHz Common Carrier Band

1. The 10.7-11.7 GHz (11 GHz) band should be made available for routine licensing on a co-primary basis in the Private Operational Fixed Microwave Service. Loading requirements for this band should be eliminated for private microwave systems.

**E. The FCC Should Establish An Industry Advisory Committee**

Because the current common carrier microwave interference standards do not provide the degree of protection that many public safety/public service microwave systems require, the FCC should convene an industry advisory committee to develop new technical requirements and interference criteria for the 4, 6 and 11 GHz common carrier bands.

**IV. In the "Spectrum Reserve" Docket, the FCC Should:**

- A. Provide for indefinite co-primary status for all existing systems in whatever bands are selected as the Spectrum Reserve and permit reasonable system modifications and expansions.**
- B. Permit voluntary negotiations between existing licensed users of the Spectrum Reserve band and new service providers concerning reimbursement of relocation costs.**
- C. Make clear that new services in these bands will not be authorized on an unlicensed basis or on any other basis where existing users would be unable to secure reimbursement for relocation.**